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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/722,411 | 11/28/2003 | Armando Marcotullio | 245946US0CONT | 7408 |

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| EXAMINER |
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GRIFFIN, WALTER DEAN

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| ART UNIT | PAPER NUMBER |
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1764

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,411

Applicant(s)

MARCOTULLIO ET AL.

Examiner

Walter D. Griffin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/676,991.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/28/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: A paragraph containing a reference to the earlier filed applications should be inserted as the first paragraph of the specification .

Appropriate correction is required.

Claim Objections

Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 11 does not further limit claim 9 because claim 9 is limited to alkali metal salts whereas claim 11 is limited to ammonium salts. It appears as if claim 11 should depend on claim 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Di Lullo et al. (US 5,445,179) in view of Ohzeki et al. (US 4,565,546).

The Di Lullo reference discloses a process for recovering and causing highly viscous petroleum products to flow by forming aqueous dispersions wherein the water content of said dispersions is at least 15%. The ratio of the petroleum product to water by weight ranges from 90:10 to 10:90. Examples of the highly viscous petroleum products include atmospheric and vacuum residues. The process comprises bringing the heated petroleum product into contact with a dispersing agent to form the dispersion and then causing the dispersion to flow. The heat is such as to flux the petroleum product. This discloses heating to make the petroleum flow which would necessarily mean that the petroleum is heated to a temperature above its softening point. The dispersing agent is an ammonium salt or a salt of an alkali metal such as sodium of condensates of naphthalene sulfonic acid with formaldehyde. The amount of dispersant ranges

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from 0.2 to 2.5% based on the total amount of water and petroleum product. See col. 1, lines 7-9; col. 2, lines 10-55; col. 5, lines 49-68; col. 6, lines 1-9; col. 7, lines 1-7; and claims 1-3 and 6.

The Di Lullo reference does not disclose the use of a visbreaking tar or the tar characteristics of claims 15-17.

The Ohzeki reference discloses that dispersants similar to those used in the process of Di Lullo can be used to disperse petroleum products such as residues from products of a thermal cracking treatment of petroleum fractions. See col. 5, lines 43-68.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Di Lullo by utilizing a visbreaking tar such as those claimed including those having the characteristics as in claims 14-17 because such a tar would be expected to be effectively treated since the Ohzeki reference discloses that such tars (i.e., residues from thermal cracking processes) are dispersed by dispersants similar to those disclosed by Di Lullo. Regarding specific chemical and physical characteristics of the tar, any tar that falls in the broad class of products disclosed by both Di Lullo and Ohzeki would be expected to be effectively treated.

Response to Arguments

The argument that the Ohzeki reference does not teach or suggest an oil in water dispersion is not persuasive because the Ohzeki reference is relied upon in combination with the Di Lullo reference to show that the claimed tars can be dispersed with dispersants similar to those disclosed by Di Lullo. This ability to be dispersed would appear to be applicable

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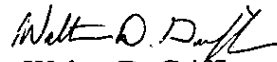
regardless of the state of the tar. Therefore, the examiner maintains that one of ordinary skill in the art would expect the tars of Ohzeki to be dispersed in the process of Di Lullo.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
June 17, 2004